

Notes on two salticid collections from China (Araneae Salticidae).

Замечания о двух коллекциях сальтицид из Китая (Araneae Salticidae).

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KEY WORDS: Salticidae, Chinese collections, descriptions.

КЛЮЧЕВЫЕ СЛОВА: Salticidae, китайские коллекции, описания.

ABSTRACT. The paper gives the results of a taxonomic study of two Chinese salticid collections which are deposited in the Swedish Museum of Natural History (Stockholm) and the Zoological Institute of the Russian Academy of Sciences (Sankt-Petersburg). A new combination, *Rhene planus* (Schenkel, 1936), ex *Ballus*, is proposed, including the designation of the lectotype; redescription of *Pseudicius courtauldi* Bristowe, 1935 is given; and two new species, *Dendryphantes potanini* sp.n. and *Plexippoides szechuanensis* sp.n., are figured and described.

РЕЗЮМЕ. Статья представляет результаты таксономического изучения двух коллекций сальтицид из Китая, хранящихся в Шведском музее естественной истории (Стокгольм) и Зоологическом институте РАН (Санкт-Петербург). Предложена новая комбинация и обозначен лектотип для вида *Rhene planus* (Schenkel, 1936), ex *Ballus*; дано переописание *Pseudicius courtauldi* Bristowe, 1935; описаны два новых вида *Dendryphantes potanini* sp.n. и *Plexippoides szechuanensis* sp.n.

Introduction.

Despite the salticid fauna of China since long being an object of great interest we still cannot provide its full account. Therefore, any local collection might prove to be important enough.

This paper presents the results of a study of two Chinese salticid collections, one belonging to the Swedish Museum of Natural History, Stockholm, SMNH, managed in Inner Mongolia and Szechuan during the expedition of S.Hedin and previously studied by E.Schenkel [1936]; and the other to the Zoological Institute of the Russian Academy of Sciences, Sankt-Petersburg, ZIP, taken in Szechuan

by G.N.Potanin in 1893. In addition, a more accurate distribution pattern, based on additional materials deriving from various parts of Middle Asia, has been provided for *Pseudicius courtauldi* Bristowe, 1935.

As a result of this study, 4 erroneous identifications by Schenkel have been corrected; a new combination, *Rhene planus* (Schenkel, 1936), ex *Ballus*, has been proposed, including the designation of the lectotype; and two species, *Dendryphantes potanini* sp.n. and *Plexippoides szechuanensis* sp.n, have been described as new.

The following abbreviations have been accepted in the text: AME - anterior medial eyes, PME and PLE - posterior medial and lateral eyes, respectively; d. - dorsally, v. - ventrally, pr. - prolaterally, rt. - retrolaterally, a - apically, F - female, M - male. The sequence of leg segments in the measurement data is as follows: femur + patella + tibia + metatarsus + tarsus. All measurements are in mm.

Type materials of the new species, as well as of *Pseudicius courtauldi* Bristowe, 1935, have been shared between the collections of the ZIP, the Zoological Museum of the Biological Institute (BI) (Novosibirsk), and the Zoological Museum of the Moscow State University (ZMMU).

Salticid collection from the SMNH studied by E. Schenkel.

In 1936, E. Schenkel published the results of a taxonomic study of Chinese spider collections managed during Sven Hedin's expeditions to Central Asia and now belonging to the Swedish Museum of Natural History. Spiders were mainly collected in Inner Mongolia (between Estin-Gol River and Baylinmyao) and a few in Szechuan. No materials were taken from the modern territory of Mongolia (for

Table. Таблица.

The main results of a study of E. Schenkel's salticid collection from the SMNH.
Основные результаты обследования коллекции Е. Шенкеля из SMNH.

E. Schenkel's identifications	Results of the present study.
1. <i>Aelurillus festivus</i> (C.L.Koch, 1834) [2 males, 1 female; S5].*	<i>A.festivus</i> [2 males]; <i>Evarcha albaria</i> (L.Koch, 1878) [1 female].
2. <i>Ballus planus</i> Schenkel, 1936 [2 males; K13].	<i>Rhene planus</i> (Schenkel, 1936) comb.n. [2 females - lectotype and paralectotype, designated herewith].
3. <i>Dendryphantes thorelli</i> Kulczynski, 1895 [2 juv.; K10, K11].	<i>Dendryphantes</i> sp. [1 juv.].
4. <i>Euophrys erratica</i> (Walckenaer, 1826) [1 male subadult; K5].	<i>Euophrys</i> sp.[1 male subadult] [more probably this is <i>E.iwatensis</i> Bohdanowicz et Proszynski, 1987].
5. <i>Evarcha albaria</i> (L.Koch, 1878) [1 male; S8].	<i>E.albaria</i> [1 male].
6. <i>Evarcha</i> sp. [a lot of juv.; K13].	Gen. sp. indet. [a lot of juv.].
7. <i>Myrmarachne lugubris</i> (Kulczynski, 1895) [1 male; S10].	<i>Myrmarachne gisti</i> Fox, 1937 [1 male].
8. <i>Pellenes gobiensis</i> Schenkel, 1936 [1 female - holotype; M5].	<i>P.gobiensis</i> [1 female].
9. <i>Pseudicius picaceus</i> (Simon, 1868) [1 male; Wentsonghaitze, S.W.Mongol., Soderbom coll.].	<i>Pseudicius courtauldi</i> Bristowe, 1935 [1 male] (Fig.4).
10. <i>Sitticus clavator</i> Schenkel, 1936 [1 male - holotype; K2].	<i>S.clavator</i> [1 male].
11. <i>Yllenus hamifer</i> Simon, 1893 [1 male subadult; S.W.Mongol., Soderbom coll.].	<i>Yllenus</i> sp. [1 male subadult].
12. <i>Yllenus hamifer</i> Simon, 1893 [1 female; M10].-**	<i>Y.robustior</i> Proszynski, 1968 [1 female].

* - Capital letter and figure after the number of specimens indicate the locality according to Schenkel, 1936.

** - For comparison with this specimen, paratypes of *Yllenus robustior* Proszynski, 1968 from the Zoological Institute of PAN (Warszawa) have been used. Material: 2 ♀ (paratypes), China, Sinkiang, Kob-nor (=Lob-nor), Charchan River, leg. M. Przewalski.

* - Заглавная буква и цифра после количества экземпляров обозначает точку сбора материала по данным Э.Шенкеля [Schenkel, 1936].

** - Для сравнения с этим экземпляром были использованы паратипы *Yllenus robustior* Proszynski, 1968 из Института зоологии Польской Академии наук (Варшава). Материал: 2 ♀ (paratypes), China, Sinkiang, Kob-nor (=Lob-nor), Charchan River, leg. M. Przewalski.

more details see Kerzhner, 1972). Schenkel's checklist of Salticidae numbered 12 species, three of them described as new.

Of these species, two have recently been re-described: *Pellenes gobiensis* Schenkel, 1936 by W.Wesolowska [1981] and D.Logunov [1992], and *Sitticus clavator* Schenkel, 1936 by D.Logunov (in press). The latter species has also been reported by J.Proszynski [1973, 1976, 1983] and D.Song [1987], although it was erroneously named *Sitticus penicil-*

latus (Simon, 1875). The remaining salticid materials from this collection have hitherto been practically ignored by researchers of Salticidae. The only possible exception was *Ballus planus* Schenkel, 1936, recorded by Alicata & Cantarella [1987] as a species being in need of restudy.

Owing to the courtesy of Dr. T.Kronstedt, of the SMNH, I had the opportunity to restudy almost all the salticid part of the collection previously studied by E.Schenkel. Out of the species mentioned by him,

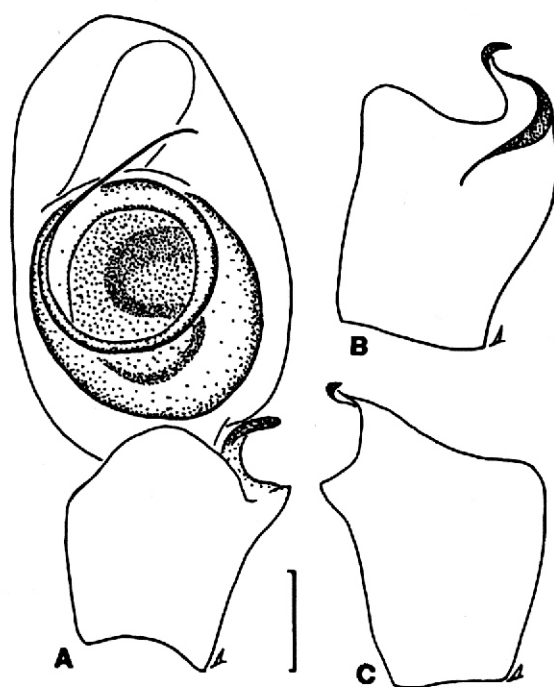


Fig. 1. *Myrmarachne gisti* Fox, 1937: a - male palp, ventral view; b - tibial apophysis, lateral view; c - ditto, caudal view. Scale 0.1 mm.

Рис. 1. *Myrmarachne gisti* Fox, 1937: а - палец самца, вентрально; б - то же, латерально; в - то же, сзади. Масштаб 0.1 мм.

only *Heliophanus ussuricus* Kulczynski, 1895, two females of *Yllenus hamifer* Simon, 1893 and some juveniles of *Dendryphantus thorelli* Kulczynski, 1895 have not been found in the collection, therefore we cannot judge which species were actually meant in these cases. The results of a restudy of 11 remaining species are presented in Table. In my opinion, there are 8 valid species in this salticid collection.

Below, new descriptions of *Rhene planus* (Schenkel, 1936) and *Pseudicius courtauldi* Bristowe, 1935, including the first one of the female of the latter species, are given. Further two species, *Myrmarachne gisti* Fox, 1937 (Fig.1) and *Yllenus robustior* Proszynski, 1968 (Fig.2), are figured, both erroneously identified by E. Schenkel.

Rhene planus (Schenkel, 1936) comb.n.
Fig.3a,b.

1936 *Ballus planus* Schenkel: 244-246, Fig. 80.
1987 *Ballus planus*, Alicata & Cantarella: 56.

MATERIAL. 1 ♀ (lectotype), 1 ♀ (paralectotype) (SMNH), China, South Kansu (without exact label and date).

DESCRIPTION. FEMALE. Measurements. Car-

apace 2.06 long, 1.98 wide, 0.98 high at PLE. Ocular area 1.35 long, 1.38 wide anteriorly and 2.00 wide posteriorly. Diameter of AME 0.40. Abdomen 2.78 long, 2.10 wide. Cheliceral length 0.65. Clypeal height 0.05. Length of leg segments: leg I 1.23 + 0.65 + 0.60 + 0.33 + 0.40; leg II 0.95 + 0.55 + 0.48 + 0.43 + 0.35; leg III 0.80 + 0.48 + 0.38 + 0.48 + 0.38; leg IV 1.20 + 0.58 + 0.65 + 0.66 + 0.40. Leg spination. Leg I: femur d.1 (in the distal part of femur); tibia v.0-2; metatarsus v.2-2ap. Leg II: femur d.0-1-1-2; metatarsus v.0-1-0. Leg III: femur d.0-1-1-1; metatarsus d.2ap. Leg IV: femur d.1-1-1; tibia v.1-0-2ap; metatarsus d.2ap. Coloration. Carapace brownish-reddish, black around eyes. Carapace surface shagreen. White hairs around eyes of 1st row, on clypeus and on frontal surface of chelicerae. PME close to 1st eye row. Sternum, maxillae and labium orange. Chelicerae brownish-orange. Abdomen yellow with brownish tinge. Dorsum with a poorly visible brown longitudinal stripe on its anterior part. Abdomen hangs strongly over carapace. Book-lungs cover yellow. Spinnerets yellowish-brownish. Leg I orange-brownish, remaining legs yellow with poorly visible brownish rings on distal parts of segments of metatarsi and tibiae. Epigyne and vulva as shown in Fig. 3a, b.

MALE unknown.

DIAGNOSIS. An accurate diagnosis for this species is rather difficult to give, as the majority of the species of the genus *Rhene* are still poorly known. It seems to be close to *Rhene atrata* (Karsch, 1881) (Fig. 3c, d), but the structure of genitalia is clearly distinguishable.

DISTRIBUTION. Only type locality.

Pseudicius courtauldi Bristowe, 1935.

Fig. 4.

1936 *Pseudicius picaceus* - Schenkel: 310.

1991 *Icius courtauldi* - Song, Zhou, Wang: 248-249, Figs. 1-5.
(other sources see in Proszynski, 1990).

MATERIAL. 1 ♂ (SMNH), SW Mongolia, Wentsonghaitze, 9.06.1927, Soderbom coll.

Additional material. UZBEKISTAN: 1 ♂ (ZIP), Karakalpakiya, Badai-Tugai Reserve, 3.06.1980, A.B.Nenilin; 1 ♂ (ZIP), Tashkent City, city park, 18.10.1979, A.B.Nenilin. KAZAKHSTAN: 1 ♂ (BI), Alma-Ata Area, Talgarsky Distr., 18 km E of Kapchagai Town, 24.06.1990, A.A.Fyodorov; 3 ♂, 2 ♀ (BI), same locality, 27.08.1992, D.V.Logunov & Y.M.Marusik. KIRGHIZIA: 1 ♂ (ZIP), Osh Area, Fergansky Mt. Range, Alashskoye Reserve, 5.01.1983, A.Urustamov; 1 ♂ (ZIP), same area, Kadamdjai, Djidalik, 14.04.1983, S.N.Rybin; 1 ♂

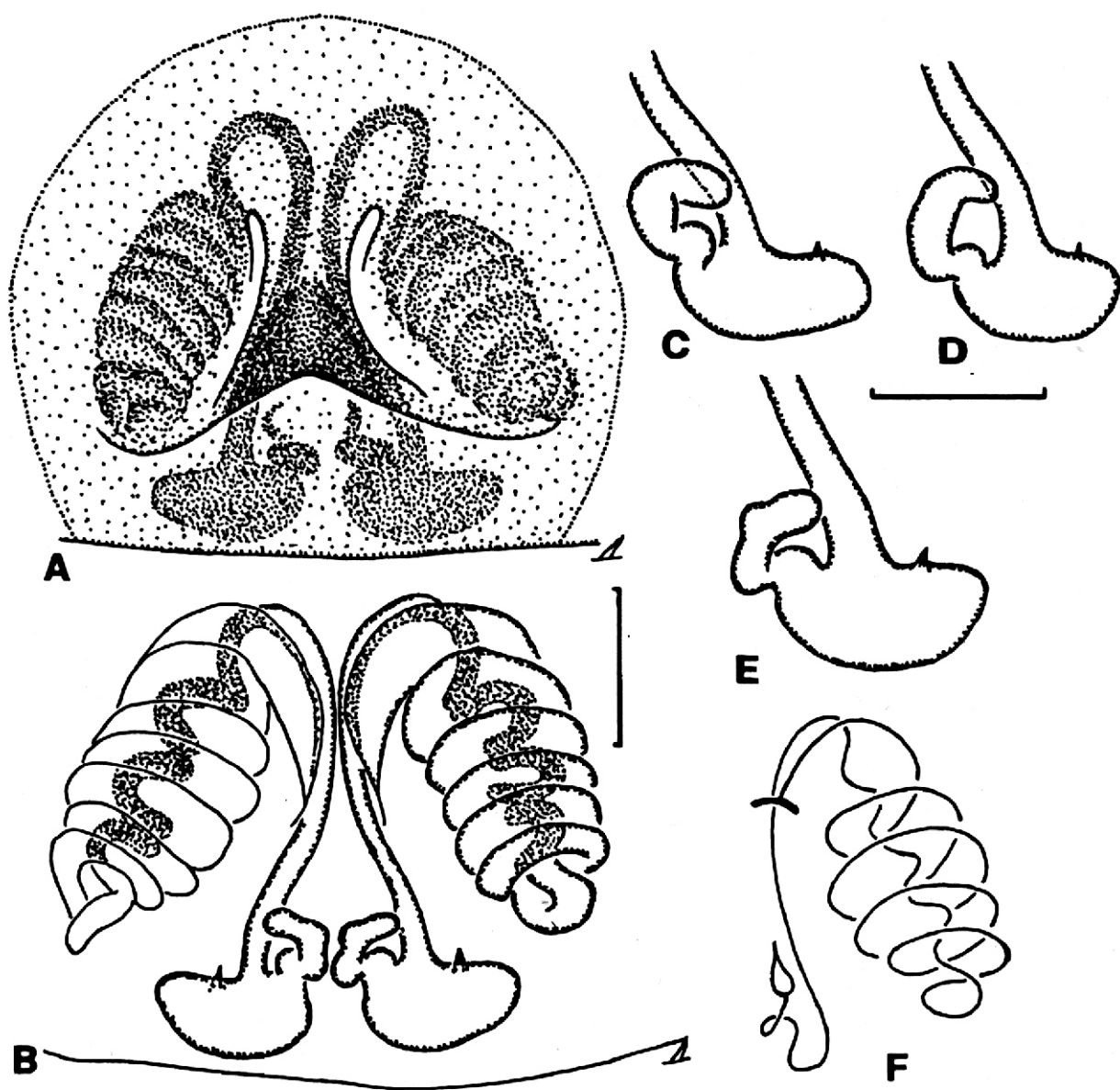


Fig. 2. *Ylenus robustior* Proszynski, 1968: a - epigyne; b - vulva; c-e - receptacle; f - schematic course of insemination duct of spermathecae. a,b,e,f - specimen from E. Schenkel's collection; c,d - paratypes of *Ylenus robustior* Proszynski, 1968. Scale 0.2 mm.

Рис. 2. *Ylenus robustior* Proszynski, 1968: а - эпигина; б - вульва; с-е - рецептакула; ф - схематическое изображение протоков семяприемников. а,б,е,ф - экземпляр из коллекции Шенкеля; с,д - паратипы *Ylenus robustior* Proszynski, 1968. Масштаб 0.2 мм.

(ZMMU), Khodja-Ata River, 20.05. 1982, S.V.Ovtchinnikov; 1 ♀ (ZIP), 1 ♀ (BI), Suzakskiy Adyry, 10.06.1982, S.L.Zonshtein. TADJIKISTAN: 1 ♂ (BI), Djilikulsk (?), Khorog, 4.11.1946, L.Mulyarskaya.

DESCRIPTION. MALE. Measurements. Carapace 2.08-2.75 long, 1.38-1.83 wide, 0.60-0.85 high at PLE. Ocular area 0.88-1.10 long, 1.08-1.31 wide anteriorly and 1.14-1.43 wide posteriorly. Diameter

of AME 0.33-0.35. Abdomen 2.50-3.50 long, 1.38-1.85 wide. Cheliceral length 0.65-0.78. Clypeus not developed. Length of leg segments: leg I 1.14-1.73 + 0.78-1.10 + 0.95-1.60 + 0.63-1.05 + 0.35-0.55; leg II 0.83-1.03 + 0.48-0.63 + 0.53-0.68 + 0.48-0.60 + 0.35-0.40; leg III 0.85-1.20 + 0.50-0.68 + 0.55-0.73 + 0.55-0.84 + 0.38-0.48; leg IV 1.15-1.45 + 0.55-0.76 + 0.75-1.00 + 0.73-1.00 + 0.40-0.53. Leg spination (femora of all legs with thick hairs, not

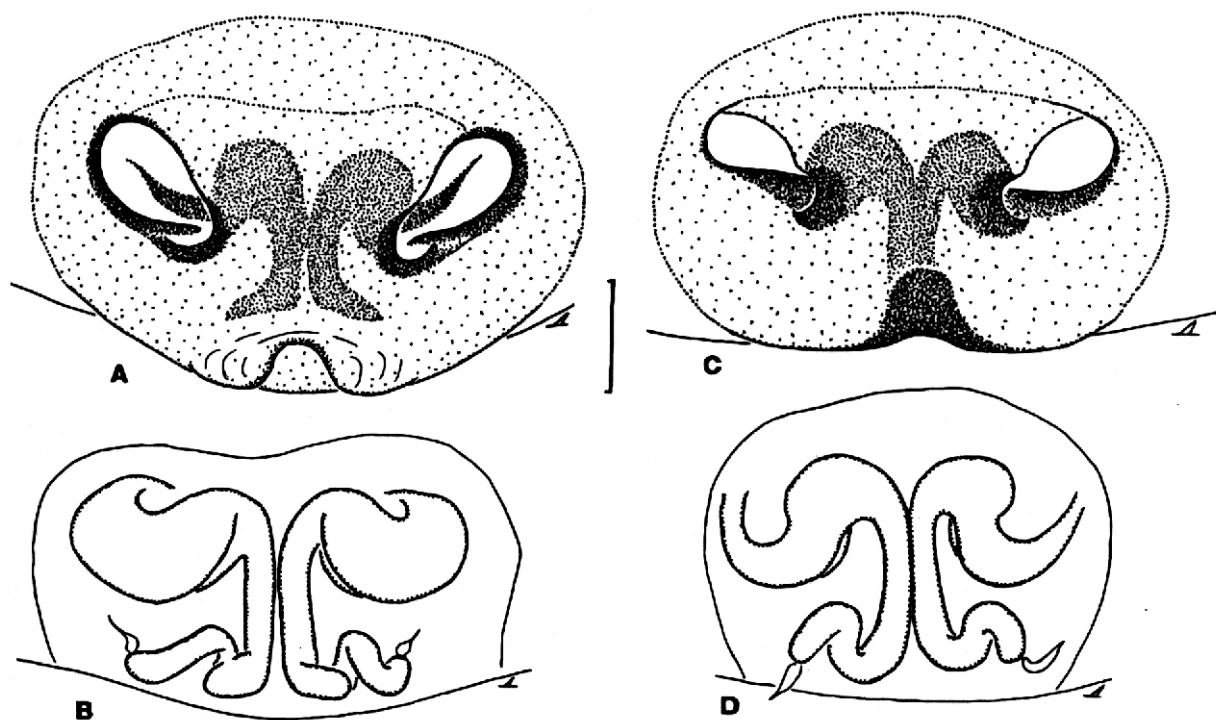


Fig. 3. *Rhene planus* (Schenkel, 1936) (a, b) and *Rhene atrata* (Karsch, 1881) (c, d): a, b - epigyne; b, d - vulva. Scale 0.1 mm.
Рис. 3. *Rhene planus* (Schenkel, 1936) (a, b) и *Rhene atrata* (Karsch, 1881) (c, d): a, b - эпигина; b, d - вульва. Масштаб 0.1 мм.

spines). Leg I: femur d.0-1-1; tibia v.1-1-1 or 0-1-1; metatarsus v.2-2ap. Leg II: femur d.1-1-2; metatarsus v.1-2ap. or 2ap. Leg III: femur d.1-1-2; tibia v.1ap. or without spines; metatarsus pr. and rt.1ap. or without spines, v.3ap. Leg IV: femur d.1-1-1; tibia v.1ap. or 1-0-1ap.; metatarsus rt.1ap. or without spines; v.3ap. Coloration. Carapace brown, densely white haired. Black around eyes. A row of trichoboria below lateral eyes on each side. Clypeal edge densely setose with white hairs. Sternum orange-brownish. Maxillae and labium orange with white tips. Chelicerae brown. Abdomen. Dorsum with brownish markings composed of two pairs of wide longitudinal bands (Fig. 4i) and a lancet-like spot on anterior part of dorsum. Bands usually darker, darkbrown, on caudal part of dorsum. Dorsum with a well-developed longitudinal scutum. Venter yellow to yellow-orange. Book-lung covers same colour as venter. Spinnerets grey. Leg I brown, remaining legs yellow or orange. Palpi orange-brownish. Palp structure as shown in Fig. 4a-d.

FEMALE. Measurements. Carapace 2.35 long, 1.60 wide, 0.75 high at PLE. Ocular area 1.03 long, 1.25 wide anteriorly and 1.40 wide posteriorly. Diameter of AME 0.38. Abdomen 3.05 long, 1.75 wide. Cheliceral length 0.60. Clypeus not developed.

Length of leg segments: leg I 1.10 + 0.80 + 0.85 + 0.59 + 0.40; leg II 0.95 + 0.58 + 0.60 + 0.48 + 0.39; leg III 1.00 + 0.55 + 0.58 + 0.65 + 0.43; leg IV 1.28 + 0.68 + 0.85 + 0.85 + 0.48. Leg spination (femora of all legs with thick hairs, not spines). Leg I: femur d.1-1-1; tibia v.1-1-1; metatarsus v.2-2ap. Leg II: femur d.1-1-2; tibia v.0-1 or without spines; metatarsus v.2-2ap. Leg III: femur d.1-1-2; metatarsus v.3ap. Leg IV: femur d.1-1-1; metatarsus v.3ap. Coloration as described for male, except as follows: legs I coloured less contrastingly in comparison with others; legs II-IV with brownish rings; femora II-IV brownish. Palpi yellow. Dorsum as shown in Fig. 4j. Epigyne and vulva as shown in Fig. 4e-g.

DIAGNOSIS. The species is closely related to *Pseudicius picaceus* (Simon, 1868), from Europe (see Andreeva et al., 1984, Figs. 61-62; Flanczewska, 1981, Fig. 96; Fuhn, Gherasim, 1984, Figs. 3A-D), but can be easily distinguished by the more compact tibial apophysis (Fig. 4b-d), structure of embolus (Fig. 4a) in males, and by the pair of large openings of the epigyne (Fig. 4e) and vulval structure (Fig. 4f) in females.

DISTRIBUTION. The species ranges from Turkey in the west, throughout Middle Asia, up to the western provinces of China in the east (Fig. 5).

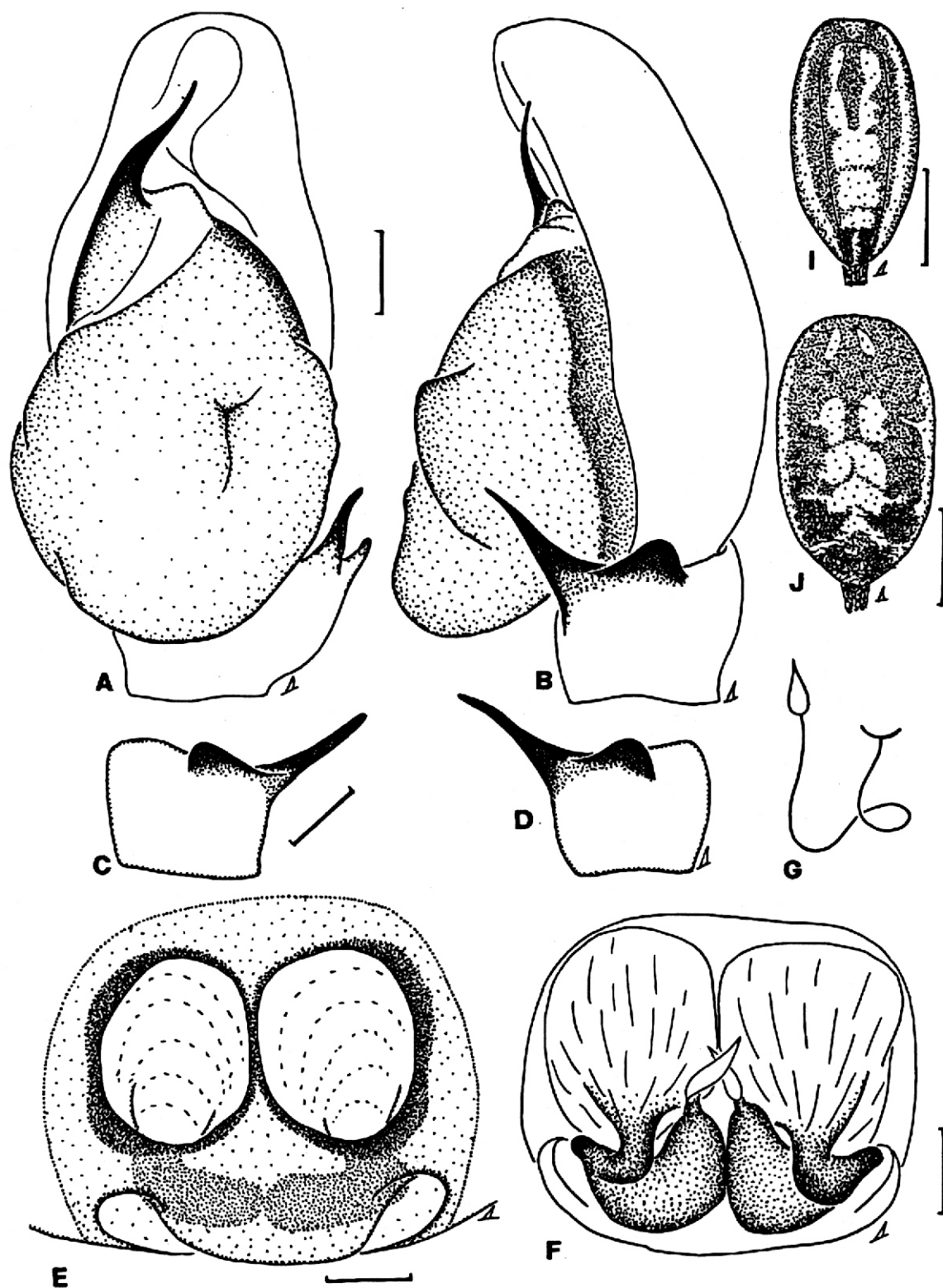


Fig. 4. *Pseudicius courtauldi* Bristowe, 1935: a - male palp, ventral view; b - ditto, lateral view; c, d - tibial apophysis of male palp, lateral view; e - epigyne; f - vulva; g - schematic course of insemination duct of spermathecae; i - dorsum of male; j - dorsum of female. Scales: a-f - 0.1 mm, i, j - 1 mm.

Рис. 4. *Pseudicius courtauldi* Bristowe, 1935: а - палец самца, вентрально; б - то же, латерально; в, д - голенный отросток пальца самца, латерально; е - эпигина; ф - вульва; г - схематическое изображение протоков семеприемников; и - брюшко самца, дорзально; ж - брюшко самки, дорзально. Масштабы: а-ф - 0.1 мм; и, ж - 1 мм.

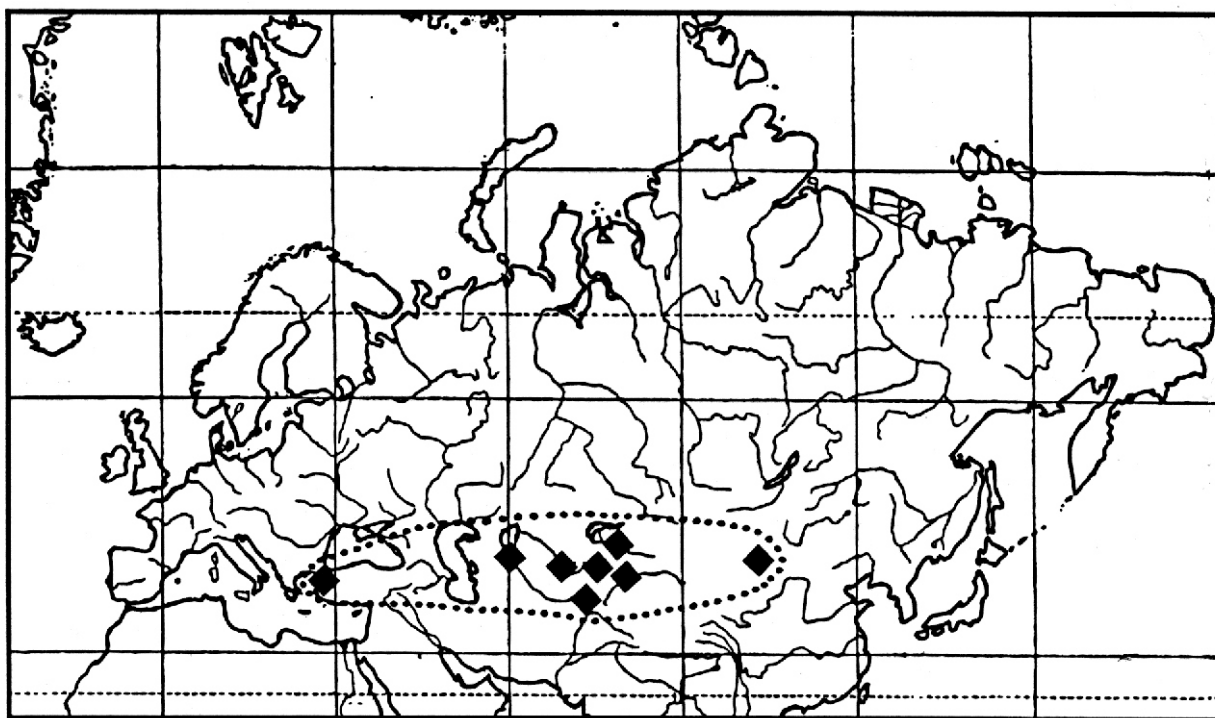


Fig. 5. Distribution of *Pseudicius courtauldi* Bristowe, 1935.

Рис. 5. Распространение *Pseudicius courtauldi* Bristowe, 1935.

G. N. Potanin's salticid collection from the ZIP.

G. N. Potanin was a world-famous Russian traveller and explorer of Central Asia who made a lot of collections of invertebrates from different parts of Mongolia and China. These have served as the basis for a great number of contributions to entomology. The collection mentioned in the present paper has partly been studied by Prof. J. Proszynski (Poland), who described *Plexippoides potanini* Proszynski, 1984 from these materials [Proszynski, 1976, 1984]. However, a complete study of the Potanin collection has never been accomplished. In 1990, Prof. Proszynski provided me with the opportunity to finish his pioneering work.

The entire collection contains 6 salticid species, all collected by G.N. Potanin from Szechuan in 1893. Of them, two are described and figured below: *Dendryphantes potanini* sp.n. and *Plexippoides szechuanensis* sp.n.

Dendryphantes potanini Logunov, sp.n.

Fig. 6.

MATERIAL. Holotype: 1 ♂ (ZIP), China, Szechuan, Urb. Da-tsien-lu, (environs of Kangding

(Dardo)], 20.06.1893, G.N.Potanin exp.

Paratypes: 16 ♀ (ZIP), 1 ♂, 2 ♀ (BI-1121), same locality, 2-22.06. 1893, G.N.Potanin's exp.; 3 ♂, 13 ♀ (ZIP), 1 ♂, 2 ♀ (ZMMU, Ta-4753), China, Szechuan, E. vic. urb., Da-tsien-lu, (environs of Kangding (Dardo)], 27.05-20.06.1893, G.N.Potanin exp.; 2 ♂, 4 ♀ (ZIP), same province and place, il. Tha-Tchan-ho, 26.07.1893, G.N.Potanin exp.

DESCRIPTION. MALE. Measurements. Carapace 2.25-2.83 long, 1.85-2.20 wide, 1.03-1.40 high at PLE. Ocular area 1.15-1.23 long, 1.25-1.43 wide anteriorly and 1.40-1.65 wide posteriorly. Diameter of AME 0.35-0.43. Abdomen 2.70-3.05 long, 1.85-2.10 wide. Cheliceral length 1.05-1.50. Clypeal height 0.06-0.07. Length of leg segments: leg I 1.53-2.05 + 1.08-1.38 + 1.19-1.63 + 0.93-1.23 + 0.63-0.70; leg II 1.13-1.43 + 0.68-0.75 + 0.68-0.83 + 0.68-0.80 + 0.30-0.53; leg III 1.10-1.28 + 0.60-0.70 + 0.58-0.73 + 0.65-0.85 + 0.48-0.53; leg IV 1.30-1.70 + 0.68-0.83 + 0.80-1.03 + 0.83-1.08 + 0.50-0.58. Leg spination. Leg I: femur d.0-1-1-3; tibia v.2-2-2ap.; metatarsus v.2-2ap. Leg II: femur d.0-1-1-3; tibia pr.0-1, v.1-1-2ap.; metatarsus v.2-2ap. Leg III: femur d.1-1-4; tibia pr. and rt.0-1, v.2ap.; metatarsus pr. and rt.2ap., v.2ap. Leg IV: femur d.1-1-3; tibia rt.1-1, v.1-2ap.; metatarsus pr. and rt.2ap., v.2ap. Coloration. Carapace darkbrown, covered with thin white scales. Black around eyes. Eye field with

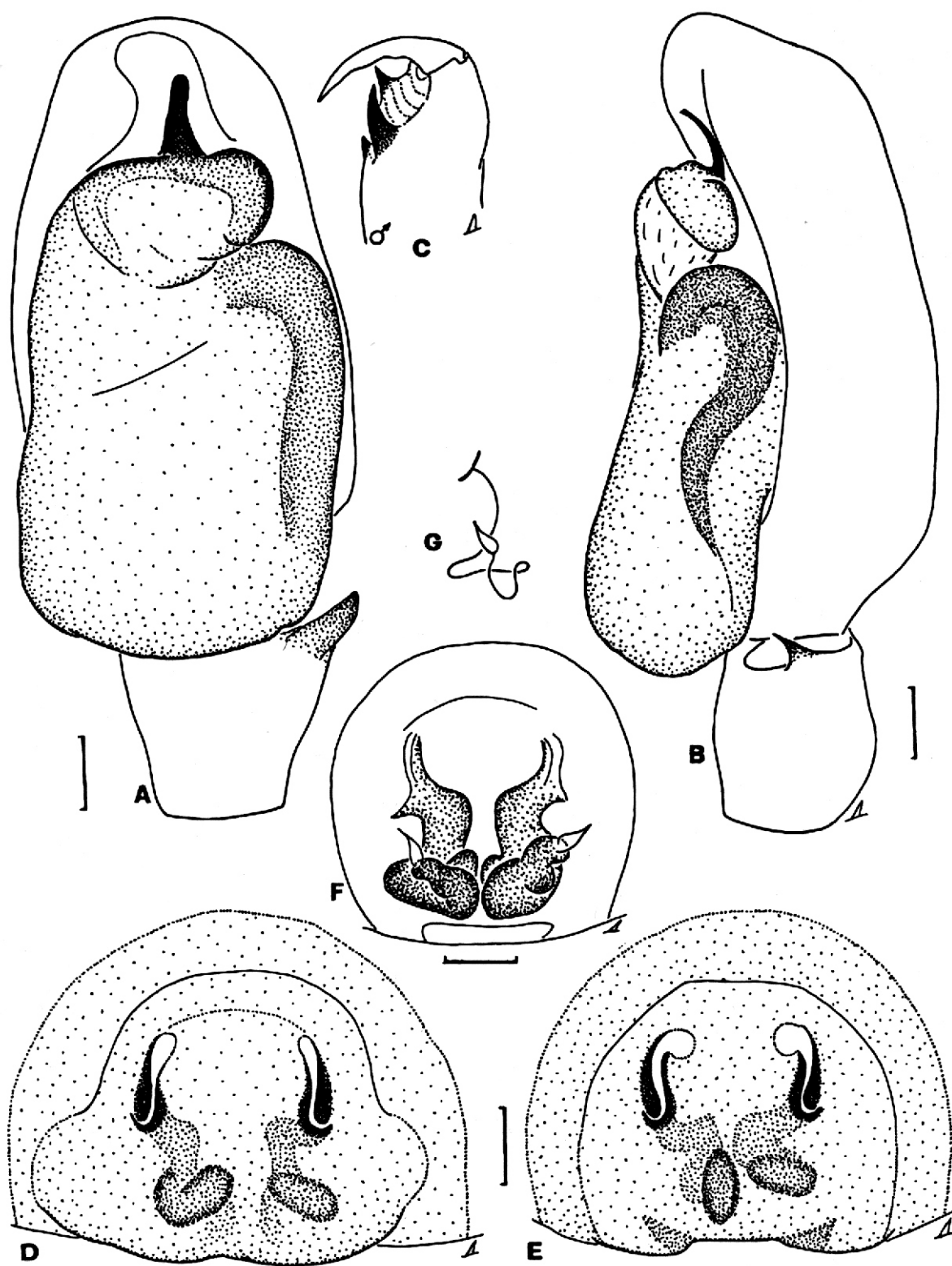


Fig. 6. *Dendryphantes potanini* sp.n.: a - male palp, ventral view; b - ditto, lateral view; c - male chelicerae, ventral view; d, e - epigyne; f - vulva; g - schematic course of insemination duct of spermathecae. Scale 0.1 mm.

Рис. 6. *Dendryphantes potanini* sp.n.: а - палец самца, вентрально; б - то же, латерально; в - хелицера самца, вентрально; д, е - эпигина; ф - вульва; г - схематическое изображение протоков семяприемников. Масштаб 0.1 мм.

shagreened surface. Sternum and chelicerae dark-brown, chelicera as shown in Fig. 6c. Maxillae and labium dark-brown with white tips. Abdomen grey-cream, with a well-developed brownish scutum covering almost entire dorsal surface. Dorsum with poorly visible markings composed of white transverse lines. Spinnerets and book-lung covers cream-coloured-grey. All legs brown, sometimes femora of all legs darker. Palp yellowish-brown, its structure as shown in Fig. 6a, b.

FEMALE. Measurements. Carapace 2.18-2.75 long, 1.80-2.13 wide, 1.00-1.40 high at PLE. Ocular area 1.23 long, 1.35 wide anteriorly and 1.55 wide posteriorly. Diameter of AME 0.38-0.40. Abdomen 3.50-3.75 long, 2.45-2.50 wide. Cheliceral length 0.93-1.00. Clypeal height 0.05-0.08. Length of leg segments: leg I 1.33-1.63 + 0.93-1.08 + 0.88-1.15 + 0.65-0.80 + 0.53-0.55; leg II 1.05-1.23 + 0.60-0.75 + 0.60-0.75 + 0.63-0.73 + 0.40-0.48; leg III 1.10-1.33 + 0.60-0.65 + 0.58-0.70 + 0.58-0.80 + 0.44-0.58; leg IV 1.38-1.73 + 0.73-1.03 + 0.88-1.05 + 0.48-0.58. Leg spination. Leg I: femur d.0-1-1-3; tibia v.0-2-2-2ap.; metatarsus v.2-2ap. Leg II: femur d.0-1-1-3; tibia pr.0-1, v.1-1-2ap.; metatarsus v.2-2ap. Leg III: femur d.1-1-4; tibia pr.0-1-0, rt.1-1, v.2ap.; metatarsus pr. and rt.2ap., v.2ap. Leg IV: femur d.1-1-3; tibia rt.1-1, v.1-2ap.; metatarsus pr. and rt.2ap.; v.2ap. Coloration as described for males, but lighter. Carapace red-brownish, clypeus densely setose with white hairs. Dorsum with 2 longitudinal brown stripes and two pairs of white spots. Anterior edge of abdomen with a transverse stripe of white hairs. Epigyne and vulva as shown in Fig. 6d-g.

DIAGNOSIS. The species differs from all known Asian congeners in the uniramous apical division of the bulbouse (Fig. 6a). It seems closely related to the North American genera *Metaphidippus* and *Phidippus*, namely *M. manni* (Peckham & Peckham, 1901) and *Ph. insignarius* C.L. Koch, 1846 (see Proszynski, 1976, Figs. 13, 43, 47, 79, 82). The discovery of such a species in Central Asia enables us to suppose that perhaps some part of the members of the genera *Metaphidippus* and *Phidippus* is better to be treated within *Dendryphantus*.

DISTRIBUTION. China: Szechuan.

ETYMOLOGY. The species is gladly named after G.N. Potanin, the famous Russian explorer of Central Asia.

Plexippoides szechuanensis Logunov, sp.n.

Fig. 7.

MATERIAL. Holotype: 1 ♂ (ZIP), China, Szechuan, Urb. Datsien-lu, (environs of Kangding (Dardo)), 12.06.1893, G.N. Potanin exp.

Paratypes: 1 ♂, 6 ♀ (ZIP), 1 ♂, 4 ♀ (BI-1120), same locality, 2-22. 06.1893, G.N. Potanin exp.; 2 ♂, 9 ♀ (ZIP), 1 ♂, 2 ♀, (ZMMU, Ta-4752), China, Szechuan, E.vic.urb., Da-tsien-lu, [environs of Kangding (Dardo)], 27.05-23.06.1893, G.N. Potanin exp.; 2 ♀ (ZIP), same province and place, fl. Tha-Tchan-ho, 26.07.1893, G.N. Potanin exp.; 1 ♂ (ZIP), same province and place, Val. Mao-niu-Kheon, 20.07.1893, G.N. Potanin exp.

DESCRIPTION. **MALE.** Measurements. Carapace 2.98-3.25 long, 2.10-2.30 wide, 1.30-1.43 high at PLE. Ocular area 1.28-1.40 long, 1.63-1.83 wide anteriorly and 1.65-1.85 wide posteriorly. Diameter of AME 0.50. Abdomen 2.88-3.13 long, 1.70-1.90 wide. Cheliceral length 0.75-0.85. Clypeal height 0.18-0.20. Length of leg segments: leg I 1.65-1.88 + 0.98-1.13 + 1.03-1.26 + 0.85-1.00 + 0.75-0.78; leg II 1.63-1.85 + 0.95-1.08 + 1.00-1.15 + 0.90-0.98 + 0.73-0.80; leg III 1.93-2.18 + 0.93-1.05 + 1.19-1.30 + 1.38-1.58 + 0.75-0.83; leg IV 1.93-2.18 + 0.85-1.00 + 1.30-1.45 + 0.78-0.80. Leg spination. Leg I: femur d.1-1-3; patella pr.0-1-0; tibia pr.1-1, v.2-2-2ap.; metatarsus v.2-2ap. Leg II: femur d.1-2-5; patella pr. and rt.0-1-0; tibia pr.1-1-1, rt.1-1 or 0-1, v.1-2-2ap.; metatarsus v.2-2ap. Leg III: femur d.1-3-4; patella pr. and rt.0-1-0; tibia pr. and rt.1-1-1, v.1-0-2ap.; metatarsus pr.1-1-2ap., rt.1-0-2ap., v.1-2ap. Leg IV: femur d.1-2-5; patella pr. and rt.0-1-0; tibia pr. and rt.1-1-1, v.1-0-2ap.; metatarsus pr. and rt.1-1-2ap, v.1-2ap. Coloration. Carapace yellowish-brownish to brownish. Eye field dark-brown. Black around eyes. A yellow longitudinal stripe behind posterior row of eyes. Sternum, maxillae, labium and chelicerae yellow to yellowish-brown. Dorsum dark-grey with a large scutum. sides of abdomen and venter grey-cream-coloured. Venter with 2 wide yellow longitudinal stripes. All legs yellow to brown. Palpi yellow-brownish. Palp structure as shown in Fig. 7.

FEMALE. Measurements. Carapace 3.15-3.55 long, 2.25-2.30 wide, 1.33-1.68 high at PLE. Ocular area 1.45-1.55 long, 1.78-1.93 wide anteriorly and 1.78-1.95 wide posteriorly. Diameter of AME 0.50-0.55. Abdomen 4.38-4.75 long, 3.05-3.25 wide. Cheliceral length 1.18-1.20. Clypeal height 0.15-0.18. Length of leg segments: leg I 1.58-1.78 + 0.98-1.10 + 1.00-1.13 + 0.80-0.85 + 0.63-0.65; leg II 1.55-1.58 + 0.95-1.00 + 0.90-1.00 + 0.80-0.90 + 0.63-0.63; leg III 1.95-2.08 + 1.05-1.08 + 1.10-1.20 + 1.23-1.38 + 0.75-0.80; leg IV 2.00-2.30 + 0.93-1.05 + 1.25-1.38 + 1.55 + 0.70-0.75. Leg spination. Leg I: femur d.1-1-3; patella pr. and rt.0-1-0; tibia pr.1-1, v.2-2-2ap.; metatarsus v.2-2ap. Leg II: femur d.1-1-5; patella pr.0-1-0; tibia v.1-2-2ap.; metatarsus

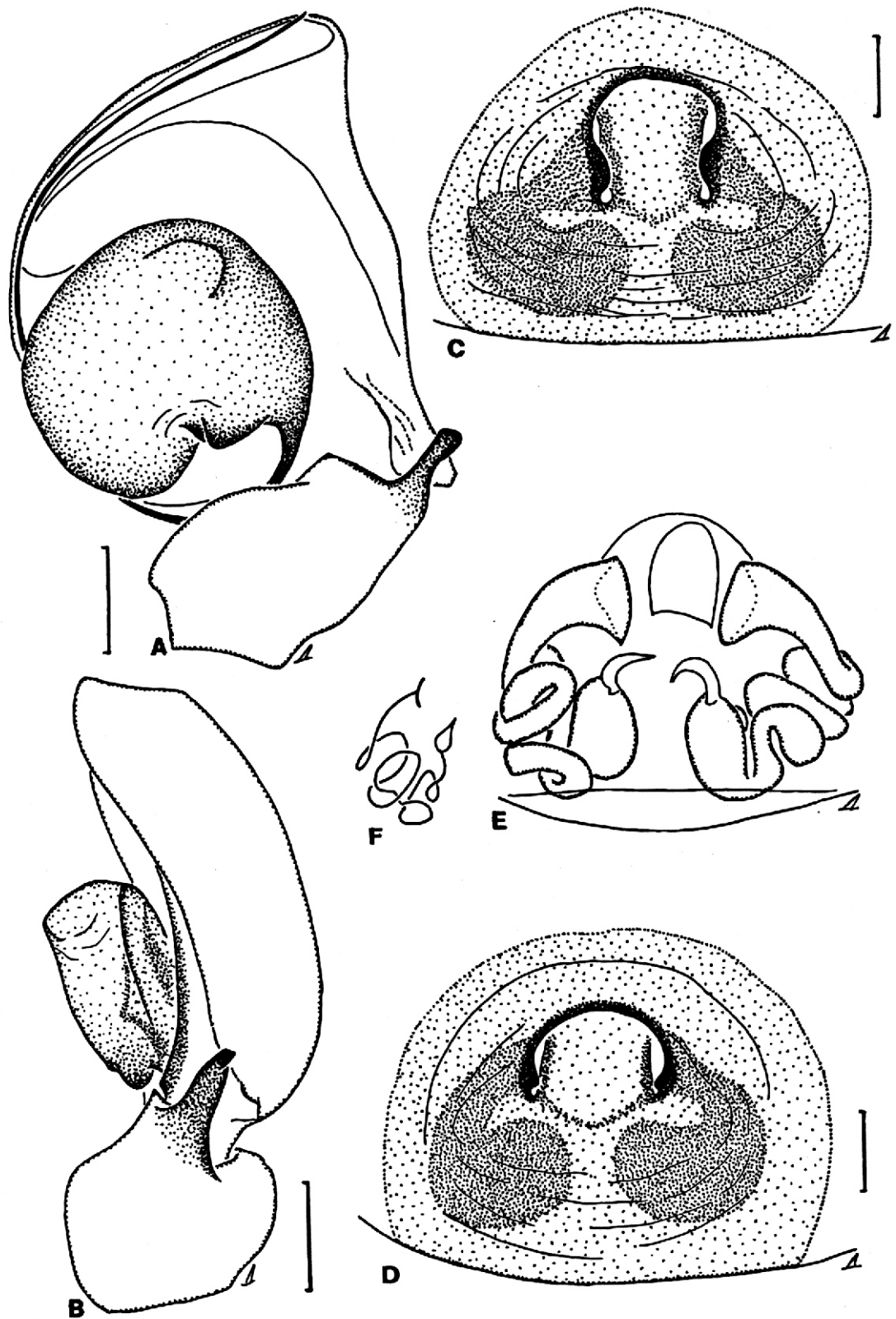


Fig. 7. *Plexippoides szechuanensis* sp.n.: a - male palp, ventral view; b - ditto, lateral view; c, d - epygine; vulva; f - schematic course of insemination duct of spermathecae. Scales: male 0.2 mm; female 0.1 mm.

Рис. 7. *Plexippoides szechuanensis* sp.n.: а - палец самца, вентрально; б - то же, латерально; с, d - эпигина; е - вульва; f - схематическое изображение протоков семеприемников. Масштабы: самец 0,2 мм, самка 0,1 мм.

v.2-2ap. Leg III: femur d.1-2-4; patella pr. and rt.0-1-0; tibia pr. and rt.1-1-1, v.1-2ap; metatarsus pr. and rt.1-2ap., v.2-2ap. Leg IV: femur d.1-1-3; patella pr. and rt.0-1-0; tibia pr. and rt.1-1-1, v.1-2ap.; metatarsus pr. and rt.1-1-2ap., v.1-2ap. Coloration as described for males. Epigyne and vulva as shown in Fig. 7.

DIAGNOSIS. The new species is closely related to *Plexippoides potanini* Proszynski, 1984 from Szechuan, *P. regius* Wesolowska, 1981 from the Far East and *P. validus* Xie, Yin, 1991 from the Guizhou Province (for the description of the latter species see Xie, Yin, 1991), but it can be easily distinguished by the structure of the tibial apophysis and the position of the bulbous tip (Fig. 7).

DISTRIBUTION. China: Szechuan.

ETYMOLOGY. The species is named after the terra typica, the Chinese Province Szechuan.

ACKNOWLEDGEMENTS. I wish to thank Professor J. Proszynski (Siedlce, Poland) for giving me the opportunity to continue his study of G.N.Potanin's salticid collection from the ZIP. My special thanks are extended to Dr. V.I.Ovtsharenko, of the ZIP, and Dr. T.Kronstedt, of the SMNH, for the loan of G.N.Potanin's and E.Schenkel's salticid collections from their museums for the present study.

References.

- Andreeva E.M., Heciak S., Proszynski J. 1984. Remarks on *Icius* and *Pseudocius* (Araneae, Salticidae) mainly from Central Asia // Ann. zool. PAN. Vol.3. No.13. P.349-376.
- Alicata P., Cantarella T. 1987. The genus *Ballus*: a revision of the European taxa described by Simon together with observations on the other species of the genus // Animalia. Vol.14. No.1/3. P.35-63.
- Flanczewska E. 1981. Remarks on Salticidae (Aranei) of Bulgaria // Ann. zool. PAN. Vol.36. P.186-228.
- Fuhn I.E., Gherasim V. 1984. Systématiques et biologiques concernant le genre *Pseudocius* Simon, 1885 (Araneae, Salticidae) en Roumanie // Trav. Hist. natur. «Grigore Antipa». Vol.25. P.51-57.
- Kerzhner I.M. 1972. [Historical survey of studies of the insect fauna of the Mongolian People's Republic] // [Eds. A.F. Emelyanov et al.] Nasekomye Mongolii [Insects of Mongolia]. Leningrad. No.1. P.57-112 [in Russian].
- Logunov D.V. in press. Notes on the «*penicillatus*» species group of the genus *Sitticus* Simon, 1901 (Araneae, Salticidae), with the description of a new species // Genus.
- Logunov D.V. 1992. The spider family Salticidae (Araneae) from Tuva. II. An annotated check list of species // Arthropoda Selecta. Vol.1. No.2. P.47-71.
- Proszynski J. 1973. Revision of the spider genus *Sitticus* Simon, 1901 (Aranei, Salticidae). III. *Sitticus penicillatus* (Simon, 1875) and related forms // Ann. zool. PAN. Vol.30. P.71-95.
- Proszynski J. 1976. Studium systematyczno-zoogeograficzne nad rodziną Salticidae (Aranei) regionów Palearktycznego i Nearktycznego. Rozprawy WSP. Siedlce. P.1-260.
- Proszynski J. 1983. Tracing of history of a genus from its geographical area on example of *Sitticus* (Araneae, Salticidae) // Verh. Naturw. Ver. Hamburg. H.26. S.161-179.
- Proszynski J. 1984. Remarks on *Anarrhotus*, *Epeus* and *Plexippoides* (Araneae, Salticidae) // Ann. zool. PAN. Vol.37. No.16. P.399-410.
- Proszynski J. 1990. Catalogue of Salticidae (Araneae). Synthesis of quotations in the world literature since 1940, with basic taxonomic data since 1758. Siedlce. 366 pp.
- Schenkel E. 1936. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. Araneae. // Ark. Zool. Vol.29A. No.1. S.1-314.
- Song D. X. 1987. [Spiders from agricultural regions of China (Arachnida: Araneae)]. Agr. Publ. House, Beijing. P.1-376 [in Chinese].
- Song D. X., Zhou N. L., Wang Y. L. 1991. [Description of the female of *Icius courtauldi* (Araneae: Salticidae)] // Acta zootax. Sinica. Vol.16. No.2. P.248-249 [in Chinese].
- Wesolowska W. 1981. Redescriptions of the E. Schenkel's East Asiatic Salticidae (Aranei) // Ann. zool. PAN. Vol.36. P.127-160.
- Xie L., Yin C. 1991. [Two new species of Salticidae from China (Arachnida: Araneae)] // Acta zootax. Sinica. Vol.16. No.1. P.30-34 [in Chinese].